

New Web Site Provides Data on Youth Violence; Goal is Risk Factor Identification and Prevention

The Washington State Department of Health recently developed a Web site to allow access to data on youth violence and other problem behaviors of youth. Violent behavior perpetrated by and directed toward youth is a public health problem in Washington State. Since 1996, approximately 78 adolescents and young adults, ages 15 to 24, have been murdered and 100 young Washingtonians have taken their own lives. From 1990 through 1996, Child Protective Services has accepted for investigation reports that include over 50,000 victims of child abuse each year.

The 1994 Youth Violence Reduction Programs Act established a community-based strategy for local prevention planning through Community Public Health and Safety Networks located across the state. These 53 self-defined, independent, and legislatively authorized entities are each governed by a board of 23 persons with backgrounds in health, education, social and children's services, justice systems, and also representatives from cities and tribes.

The Act addresses youth violence (both that directed at others and suicide), and associated problems such as adolescent substance abuse, pregnancy, dropping out of high school, child abuse and neglect, and domestic violence. The Act recognized that violent behavior among youth often shares common risk and protective factors with the other problem behaviors. Risk factors are characteristics of individuals or of family, school, and community environments that are empirically associated with an increased likelihood of youth problem behaviors. Conversely, protective factors are characteristics related to a decreased likelihood of such problem behaviors, even among those exposed to multiple risk factors.

Risk and protective factors are often two ends of a continuum. Thus, while low academic achievement is a risk factor for several of the outcomes listed in the act (dropping out of school, substance use, teen pregnancy, and youth violence), high academic achievement is protective. Some of the problem behaviors identified in the Act are, in turn, risk factors for other problem behaviors. For example, victims of child abuse are at risk for teen substance abuse, pregnancy, and suicide. *Continued page 2*



Proposed Changes in Notifiable Conditions:

Potential Exposure to Rabies

Although human rabies is rare, with only two cases in Washington State in the past six decades, the disease is almost universally fatal. Thus, potential exposure to rabies warrants immediate and definitive public health action.

Historically, human rabies cases have been reported when the disease is in its final stages or after the person dies. It is important that cases be reported early enough to permit prophylaxis of others at risk by administration of human rabies immune globulin and rabies vaccination. Most importantly, reports of potential exposure allow for prompt consultation with local health jurisdictions and treatment intervention, which may prevent disease in the case patient.

Proposed changes to the reportable conditions regulations are intended to increase the "window of opportunity" for prophylactically treating persons with potential exposure to rabies. These changes also will provide more useful information
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Youth Violence *(from page 1)*

Web Site Address

To access the data on youth violence, visit this site:
HYPERLINK <http://www.doh.wa.gov/EHSPHL/Epidemiology/NICE> and click on YRAD.

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Coordination of Information

The Act designated DOH as the state-wide agency for the coordination of all information related to youth violence and related behavior. While much of the information on outcomes and risk and protective factors must be gathered locally, state agencies routinely collect some data, such as the teen childbearing rate and the percentage of students dropping out of school. DOH and the Department of Social and Health Services (DSHS) assembled the database from computerized records managed by various state agencies including the Department of Labor and Industries, DSHS, DOH, Washington State Patrol, Office of the Administrator for the Courts, Washington Association of Sheriffs and Police Chiefs, and Office of Superintendent of Public Instruction.

Geographic information system technology allowed events to be assigned from the specific locale at which they were recorded (e.g., zip code, school district, police district) to the appropriate network. The Youth Risk Assessment Database (YRAD), a comprehensive report published in June 1995, included indicators for all the behaviors specified in the Act and information on risk and protective factors. An indicator is a surrogate measure for the outcome of interest. For example, the rate of

TABLE 1: Indicators for outcomes specified in the Act

Youth violence
Homicide deaths
Firearms and all weapons incidents in schools
Adolescent substance abuse
Alcohol- or other drug-related hospital admissions
Adolescent pregnancy
Adolescent birth rate
Adolescent suicide
Suicide deaths
Suicide-related hospital admissions
Dropping out of high school
High school graduation rate
Child abuse and neglect
Victim referrals for child abuse and neglect
Domestic violence
Petitions filed for domestic violence/civil anti-harassment protection orders

juvenile arrests for violent crimes is not an exact measure because it does not include violent acts that do not result in an arrest. The networks used the information in the 1995 report to help decide which problems were most important to address.

Establishing Baselines, Monitoring Progress

In fall 1996, representatives from the networks, local health jurisdictions, and state agencies requested that DOH update the data in the 1995 report to help them establish baselines for the targeted outcomes. They requested that data be provided at least every two years so that they could monitor progress toward reducing the problem outcomes and risk factors and increasing protective factors.

The new Web site is the response to that request. The data include indicators for all the problem behaviors specified in the Act and some of the risk and protective factors documented in the scientific literature (Tables 1 and 2). The Web site (see side column for address) includes information necessary to interpret the data and each indicator. A query function allows the user to obtain data for specified indicators and networks. DOH will post updated data as available.

For information on the Web site database, contact Cathy O'Connor, DOH Office of Epidemiology, 360-236-4251, or CMO0303@doh.wa.gov. For information on community networks, contact Laura Porter at the Family Policy Council, 360-407-0817.

TABLE 2: Risk and protective factors

Risk Factors

- Low socioeconomic status
- Children and adults receiving Aid to Families with Dependent Children (AFDC)
- Children and adults receiving food stamps
- School-based free and reduced-price lunch applications
- Unemployment
 - Percentage of the workforce that is unemployed
 - Unemployment claimants

Youth Protective Factors

- Grade 4 Reading 3 or more times per week just for fun
- Grade 8 Having a computer at home
 - At grade appropriate for age
 - Watching TV less than 1 hour per day
 - No change in schools during the school year
 - Good attendance
- Grade 11 Taking advanced classes
 - Satisfied with school
 - Planning education after high school

Monthly Surveillance Data by County

November 1998* – Washington State Department of Health

County	E. coli O157:H7	Salmonella	Shigella	Hepatitis A	Hepatitis B	Non-A, Non-B Hepatitis	Meningococcal Disease	Pertussis	Tuberculosis	Chlamydia	Gonorrhea	AIDS	Pesticides†	Lead\$#
Adams	0	0	0	0	0	0	0	0	0	1	0	0	0	1/#
Asotin	0	0	0	0	0	0	0	0	0	3	0	0	0	0/0
Benton	0	0	0	0	0	0	0	0	1	6	0	0	0	1/33
Chelan	0	1	1	0	0	0	0	0	0	22	0	0	0	7/30
Clallam	0	1	0	0	0	0	0	0	0	6	0	0	0	0/#
Clark	1	1	1	6	1	0	0	1	0	51	8	0	0	0/5
Columbia	0	0	0	0	0	0	0	0	0	0	0	0	0	0/0
Cowlitz	0	1	0	3	0	0	0	0	1	11	0	0	0	1/51
Douglas	0	1	0	0	0	0	0	0	0	7	0	0	0	0/0
Ferry	0	0	0	0	0	0	0	0	0	0	0	0	0	0/0
Franklin	0	0	0	0	0	0	0	0	0	9	0	1	1	1/#
Garfield	0	0	0	0	0	0	0	0	0	0	0	0	0	0/0
Grant	1	1	3	1	0	0	0	0	0	0	0	0	1	0/#
Grays Harbor	0	0	0	0	1	0	0	0	1	14	0	0	1	0/0
Island	0	0	0	0	0	0	0	0	0	4	2	0	0	0/#
Jefferson	0	0	0	0	0	0	0	0	0	2	0	0	0	0/0
King	6	29	2	8	3	0	0	13	10	229	59	5	0	3/46
Kitsap	0	1	1	0	0	0	0	0	0	4	0	0	0	2/20
Kittitas	0	0	0	0	0	0	0	0	0	1	0	0	0	0/0
Klickitat	0	0	0	0	0	0	0	0	0	6	0	0	0	0/#
Lewis	1	0	1	0	1	0	0	1	0	2	0	0	0	0/#
Lincoln	0	0	0	0	0	0	0	0	0	0	0	0	0	0/#
Mason	0	0	0	0	1	0	0	0	1	4	0	0	0	0/#
Okanogan	0	1	0	0	0	0	0	0	0	1	0	0	1	0/#
Pacific	0	0	0	0	0	0	0	0	0	0	0	0	0	0/#
Pend Oreille	0	0	0	1	0	1	0	0	0	0	0	0	0	0/0
Pierce	2	9	1	0	0	0	0	1	1	117	34	3	1	0/81
San Juan	0	0	0	0	0	0	0	0	0	0	0	0	0	0/0
Skagit	0	1	1	0	0	0	0	0	0	2	1	0	0	0/5
Skamania	0	0	0	0	0	0	0	0	0	0	0	0	0	0/0
Snohomish	1	5	6	1	2	0	1	5	2	37	8	1	0	0/16
Spokane	2	10	0	14	2	0	0	0	2	52	10	1	0	7/176
Stevens	0	0	0	0	0	0	0	0	0	3	0	0	0	0/0
Thurston	0	2	0	0	0	0	0	0	0	23	0	1	0	0/16
Wahkiakum	0	0	0	0	0	0	0	0	0	0	0	0	0	0/0
Walla Walla	0	0	0	0	0	0	0	0	0	14	2	0	0	0/5
Whatcom	0	0	1	0	0	0	0	1	0	1	2	0	0	0/#
Whitman	0	1	0	0	0	0	0	0	0	0	0	0	0	0/0
Yakima	1	1	8	2	1	0	1	11	0	13	1	2	4	0/16
Unknown														0/2

Current Month	15	66	26	36	12	1	2	33	19	645	127	14	9	23/522
November 1997	14	49	19	47	5	2	7	42	23	779	133	47	20	17/323
1998 to date	105	467	205	911	103	22	60	309	239	9912	1780	372	401	132/3378
1997 to date	121	561	250	606	73	26	85	370	277	8510	1772	521	364	165/4089

* Data are provisional based on reports received as of November 30, unless otherwise noted.

† Unconfirmed reports of illness associated with pesticide exposure.

\$# Number of elevated tests (data include unconfirmed reports) / total tests performed (not number of children tested); number of tests per county indicates county of health care provider, not county of residence for children tested; # means fewer than 5 tests performed, number omitted for confidentiality reasons.



WWW Access Tips

Guidance for evaluating potential human rabies exposure is available online at: <http://healthlinks.washington.edu/nwcp/pep/rabies/>

How to Comment on the Proposal for Reporting PHRE

We would appreciate your comments on the proposed additions and deletions to the list of reportable conditions described in this article. To comment, please contact Dr. John Grendon, 360-236-3362 or jhg0303doh.wa.gov.

For more information on the notifiable conditions revision process, contact Greg Smith, Office of Community and Family Health, 360-236-3704 or gts0303@doh.wa.gov

Rabies Exposure *(from page 2)*

regarding the risk factors for and distribution of potential human rabies exposure (PHRE) and the use of rabies postexposure prophylaxis (PEP).

Proposed Regulatory Changes

Under the proposed rule changes, cases of human rabies will still be reportable to local health jurisdictions (LHJs). However, a new feature of the regulations will require primary care providers (e.g., physicians, nurse practitioners, physician assistants) and veterinarians to report cases of PHRE to their respective LHJ within 24 hours of occurrence. These reporters also will be encouraged to consult with LHJs on decisions to administer PEP. In turn, LHJs will report incidents of PHRE to the Washington State Department of Health (DOH) within one week after their notification, or immediately if consultation and follow-up assistance from DOH is required.

An additional proposed regulatory change is that animal bites not related to potential human rabies exposures (as defined below) will no longer be reportable statewide, although some LHJs may decide to continue to require reporting within their local jurisdictions as part of their animal control or injury control programs.

Case Definition

Rabies transmission can occur via bites and contamination of scratches, abrasions, or mucous membranes by an animal's saliva, brain tissue, or spinal fluid. Furthermore, in the case of exposure to bats, the

only known vector of rabies virus in Washington, exposure may be presumed when there is reasonable probability that such contact unknowingly occurred. For example, a sleeping person awakes to find a bat in the room or an adult sees a bat in a room with a previously unattended child, mentally disabled or intoxicated person, or incompletely vaccinated pet.

Thus, for this surveillance activity, PHRE is defined as exposure through one or more of the above transmission routes in any of the following circumstances:

- exposure to an animal that subsequently tested positive for rabies infection;
- exposure to an animal that subsequently tested negative for rabies infection, BUT rabies PEP for the affected person had already been initiated; or
- exposure to an animal that subsequently was not tested for rabies infection, BUT rabies PEP for the affected person had already been initiated.

Use of the Surveillance Data

At both the state and county level, the combination of reports of PHRE and human rabies cases will enable public health officials to react earlier and more effectively to evaluate the likelihood of rabies exposure and prevent deaths. Over time, PHRE surveillance will help identify risk factors for potential rabies exposure, such as animal species involved, geographic locations, age of persons exposed, activities leading to exposure, and indoor versus outdoor settings. This information will be useful in developing rabies prevention programs and evaluating their effectiveness.

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